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SEPTEMBER
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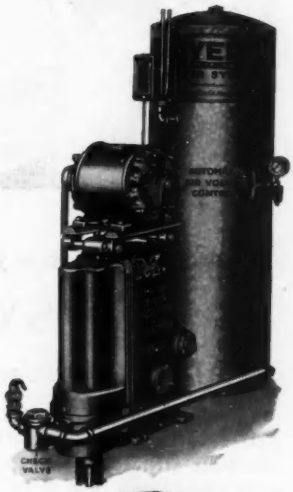

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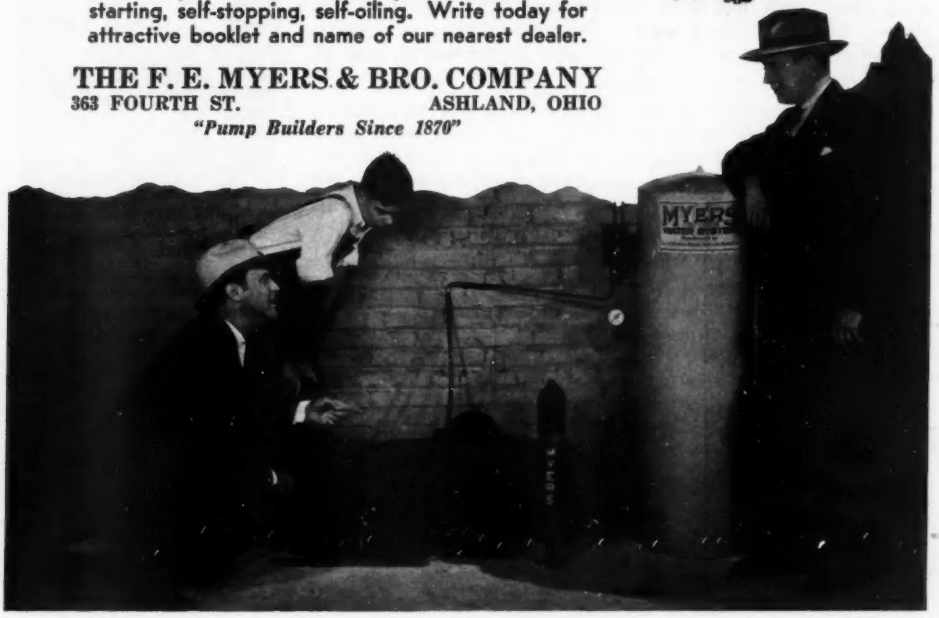

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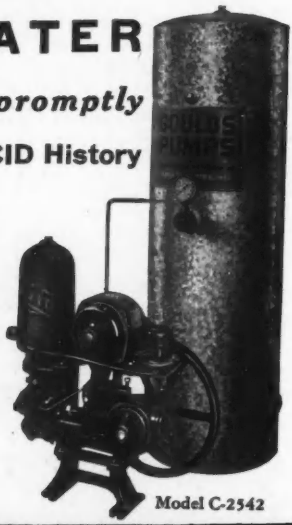

Model C-2542

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September, 1934
Vol. 7 No. 9

Electricity on the Farm

IN THIS ISSUE

How to Sell More Milk

BY ANDREW APPLEBY

The following summary is the result of an interview by the author with a dairy herdsman: Milking by machinery saves time; makes the work easier; is good for and liked by the cows; and, if equipment is properly cared for, is an aid in keeping milk clean. Read the details of this interview on page 6.

What Is It Worth to Have Water Under Pressure in the Home?

BY E. W. LEHMANN

Some persons have endeavored to place a value on the convenience of having certain facilities available in the home, but, in reality that is an impossibility. The value of water under pressure in the farm home, discussed by the author on page 9, is not a money value, but its worth as a convenience and time saver in the daily farm tasks, as well as an aid in improving the health of the entire family.

Can You Can?

BY VERA B. MEACHAM

The right way of doing a task is the best, and in the long run the cheapest. And the canning of fruits and vegetables is no exception. Scientific research has done much to aid the housewife to successfully store away fruits and vegetables for winter use. See page 12.

Regular Monthly Features

On the Air, page 15, Electrical Housekeeping, page 16, Questions and Answers. page 17.

EDITORIAL

Milking

IT takes about four minutes longer to milk a cow by hand than by using a modern milking machine. At one dairy farm one man milked 25 cows per hour with the aid of a machine.

And milking cows by machine is "rest" compared with hand milking. At least that's the way one farmer who has to do his milking after a hard day's work in the field expresses it.

Cows prefer machine milking, for it is uniform in operation and does not hurt sore teats.

Cleaner milk, too, can be produced by machines if the machines are properly used and cared for.

If there is one painfully regular drudgery that farm boys dislike it is the milking of a large number of cows by hand after the work day should have been over. But electricity and milking machines have changed things and now the task of milking can be classed as an interesting chore.

THE PUBLISHERS.

Issued Monthly by
CASE-SHEPPERD-MANN PUBLISHING CORP.
Editorial-Executive Offices: 24 West 40th Street, New York
KARL M. MANN, *President* I. H. CASE, *Vice-Pres. and Gen'l Mgr.*
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Subscription price, 75 cents per year; single copies, 10 cents; Special Bulk Rates on Application
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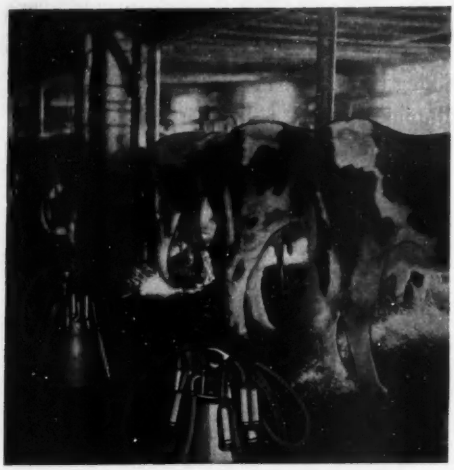
HOW TO SELL MORE MILK

By ANDREW APPLEBY

WHEN you go to the Century of Progress in Chicago this summer, be sure to visit the clean milk exhibit, sponsored by Brook Hill Farm of Genesee Depot, Wisconsin, largest producer of certified milk in the middle west. There you will see the milking, carrying, cooling bottling, capping and delivery of milk in one continuous mechanical process from the time the teat cups are put on the cow till the milk is sold over the counter.

This exhibit is near the south end of the grounds at 33rd Street, near the Travel and Transport Building. There since April has been erected a building 200 feet long and 45 feet wide to house



Machines can save labor, and aid in producing better quality under ordinary farm conditions.

the display and a herd of 30 cows. It is largely made of glass building blocks which can be laid up like brick, are easily washed, and admit light.

Watching the Milking Process

You can't go in. A constant stream of visitors would disturb the cows and make it hard to keep the place perfectly clean. But you can watch the whole process through plate glass windows. Every little while cows are let into the milking stalls which are higher than the floor where the attendant stands. Without having to stoop over, he puts the teat cups on each cow. The milk is drawn into glass jars hanging on scales so you can see how fast the milk comes, and how much each cow gives. From the glass jars vacuum draws the milk to the bottling room. There it runs over the cooler and immediately into the bottler. All the time there is a long line of empty bottles coming in on a conveyor and going out the other side of the room filled and capped.

At the counters outside the bottling room, and within fifty feet of the cow that produced it, you can buy and drink the best milk you ever tasted. Talk about fresh! It may not be more than five minutes old but it is ice cold and it has not been exposed to any contamination, not even the air.

Just to show how it is done, they sterilize all the equipment several times a day, really oftener than necessary, even for certified milk.

During the five months the exhibit will run, the idea of better milk will be impressed on the minds of millions of people. This full sized demonstration and the publicity it will get should make it easier for any progressive milk man to find a market for a quality product handled by modern methods.

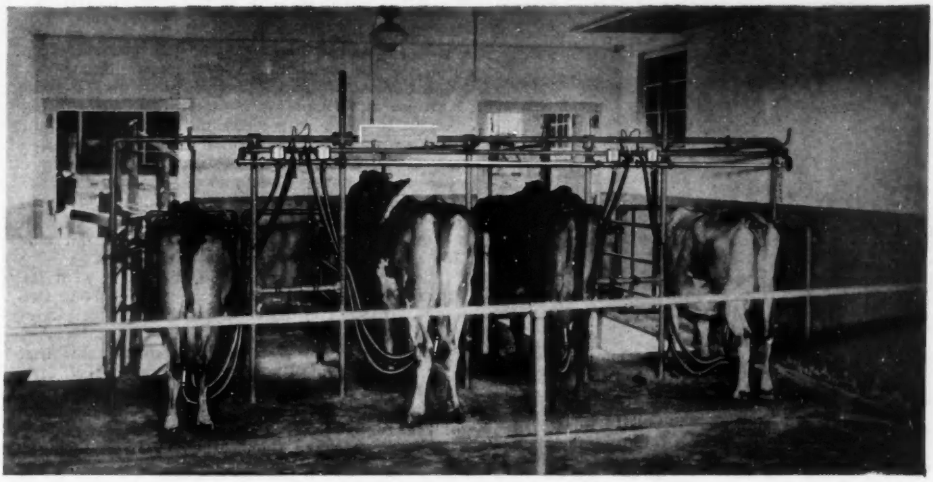
The Combine Milker

For producers who distribute their own milk in the smaller cities and who would like to outdistance competition as "The Best Milk Man in Town" there is already on the market a less costly form of this milking parlor system. Such an outfit does not include the glass jars, and the scales, but it does take the milk right from the cow to the can or the cooler. In fact, you can attach three cans as shown on page 7, (or ten if your herd gives that much) and as soon as one is full, the milk will automatically go to the next one.

One advantage claimed for this combine milker is that the barn does not have to be maintained in proper condition for milking. It is even suggested that in warm climates no cow barn is needed. In that case the cows would pass from a yard into the milking stalls and then out into a different yard.

By far the greatest advantage to the local milk man, however, is in advertising. Visitors flock to a farm with a milking parlor because it is a novelty. But when they see how clean and uncontaminated this system keeps the milk, they want such milk for their own use. Naturally the first dairyman in any community to adopt the new system will get the most attention, publicity, and advertising.

However you need not be a distributor of bottled milk to profit from the benefits of a milking machine. And if you are now using an outfit with an old fashioned, hard running pump and a big gasolene engine, you can bring it up to date with very little trouble. The modern pumps take only about one-third or one-fourth of the power the old pumps needed. With electric motor drive, they save space, save time, save trouble, and save a



large part of the cost of power. You can get one of these new, light-running electric vacuum pumps from most any good dealer. Usually it need not be the same make as the rest of your outfit. The leading manufacturers make pumps, pails, and heads that are all interchangeable. In most any combination, they will modernize an old outfit to give the full advantage of machine milking.

Just last week the herdsman on a small dairy farm gave me his summary of these advantages.

"I wouldn't work on a dairy farm without a milking machine," said he. "My brother and I came here to work about a year and a half ago, and except for a week's vacation, we have never missed a milking. We don't dread the job at all. Neither of us ever used a milker before, but we soon learned it and liked it. At the end of a day's work we can almost rest while milking with the machine."

"Does it save time as well as make the work easier," I asked.

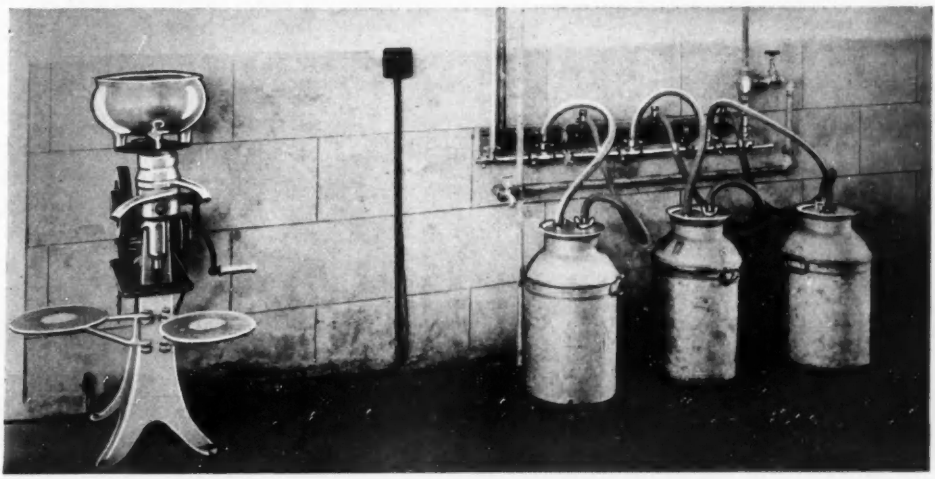
"We've just had a chance to check that," he replied. Since I've been here, we've only milked once by hand. But the other morning the breaker points in our pumps gave out after about five years of use. We had 19 cows left to milk and it took us an hour and a half. With the machine we do this herd of 21 to 24 in an hour."

That little experience compares pretty well with more extended tests that have been made.

On the government farm at Beltsville, Md. one man milks 25 cows an hour using the combine form of milker that I have already described. In Kansas a comparison of ordinary pipe line milkers with hand milking showed that the machine saved 4 minutes per cow per milking. Twice a

Above: A simplified combine milker for "The Best Milk Man in Town."

Below: Receiving the milk direct from a combine milker. When one can is full the milk goes into the next.



A good reliable job in its day. But a modern pump would need a much smaller motor and run at a fraction of the cost.

day and 30 days a month makes that 4 hours a month for each cow in the herd. For a herd of 25 cows, 100 hours means quite a saving no matter how you figure labor costs.

"While it is helping you, does it harm the cows?" I asked my herdsman friend. "How do they like it?"

"No, it doesn't harm them. We haven't had a quarter go bad since I've been here. The machine always milks just the same way. It's so uniform and steady, I think it's easier on the cows. I know our heifers take to the machine better than they do to hand milking. And the machine will milk a cow with a sore teat when you can hardly do it by hand."

Some cows give down better to the machine, but on the other hand there are a few that it will not milk successfully.

"How about sanitation? Can you produce clean milk with a machine?" I challenged him.

"Clean milk? Say! My brother and I were born on an Illinois farm and after we got big enough to know how dirty milk can be, we quit drinking it. But the machine has converted us,—we each drink a couple of quarts a day now."

If the machine itself and the cow's teats are clean, there isn't much chance for dirt to get into the milk, not nearly as much as there is with an open pail. Of course you can strain out hair and straw, but not manure and microbes.

"Our power for two single units," he went on, "is a ¾ H.P. motor and we use it about two hours a day. You might say it costs scarcely anything."

As a matter of fact careful records show that "scarcely anything" amounts to about 3 Kw. Hrs. for milking a cow a month with the ordinary pipe line machines. The portable outfits take only about half as much.

There you have them,—the results of using a milking machine in a small herd.

It saves time.

It makes the work easier.

It is good for the cows and they like it.

Properly cared for, it is an aid in keeping milk clean.

"Properly cared for" means a lot. Proper care will just make the difference between success and failure. But if there is *hot water at the barn,* cleaning the machine takes only about as much time as milking one more cow.

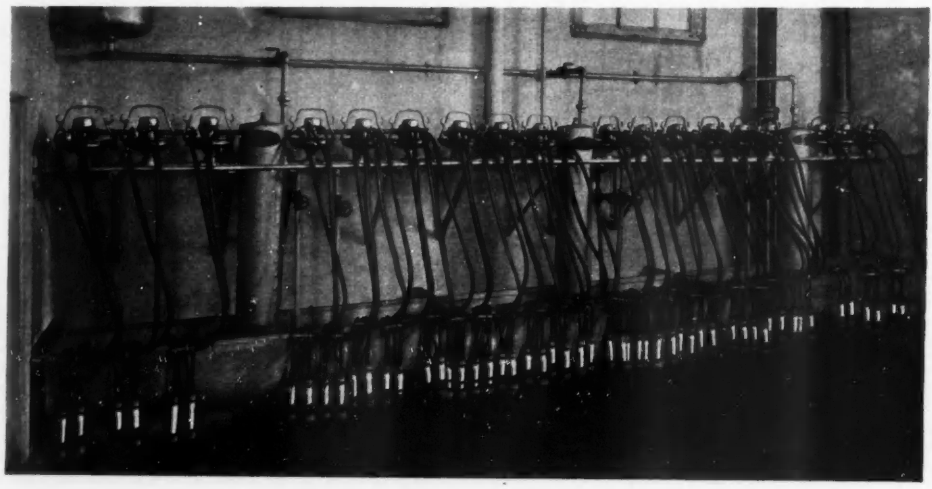
Summing it all up, here are three indications of the practical value of milking machines.

The oldest and largest producers of the very finest certified milk use machines.

Some of the highest yielding cows in the world are milked three or four times a day by machine.

Careful farmers with small herds find that machine milking pays.

Big dairies let vacuum power wash the milking machine.



Carrying water on the Harry Reifsteck farm was a daily chore before an electric system was installed.

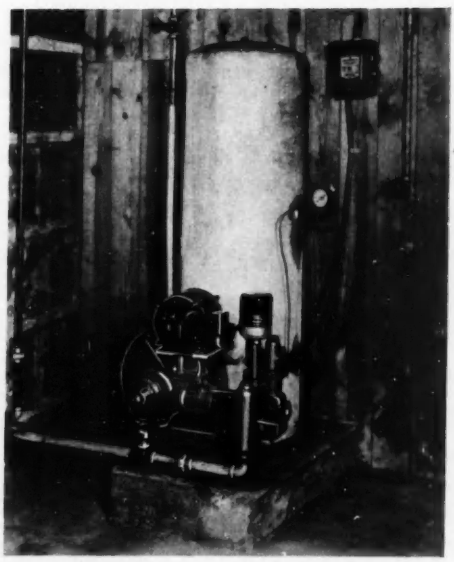
What is it Worth to have WATER UNDER PRESSURE in the Home?

By E. W. LEHMANN

FARMERS, who have water under pressure, tell me invariably that it is worth much more than it costs. They say, "We do not think so much of the water system itself but it is the things that it makes possible that count: the showerbath after a hard day's work; the turn of the faucet to water the horses after returning tired from the field; a plentiful supply on hand at all times without having to ask someone to go fill the bucket. It is impossible to put a money value on a lot of these things."

In fact, most people, when asked, refuse to attempt to put a money value on water under pressure in the home. The only comment of Harry Reifsteck, one of the cooperators on the Illinois experimental line, was that having water under pressure in the home was priceless. His father, George Reifsteck, was one of the first in the community to put in a water pressure system, one of the old engine driven types with a large pressure tank. This system was changed over to electric drive with automatic control about ten years ago. Mr. Reifsteck considered providing water under pressure as the most important step in making the home modern.

A. E. Burwash, a Champaign County dairy farmer, stated that he would not be willing to get along without his water system and the things that are made possible by it for $10.00 a month. In addition to having all the modern facilities in his home that are found in the city home where water is provided under pressure, he has a sufficient amount for the dairy cows and other livestock. He stated that a plentiful supply of hot and cold soft water and water for drinking is



The "heart" of the modern automatic water system is assembled in a neat compact unit which can be accommodated in a minimum of space.

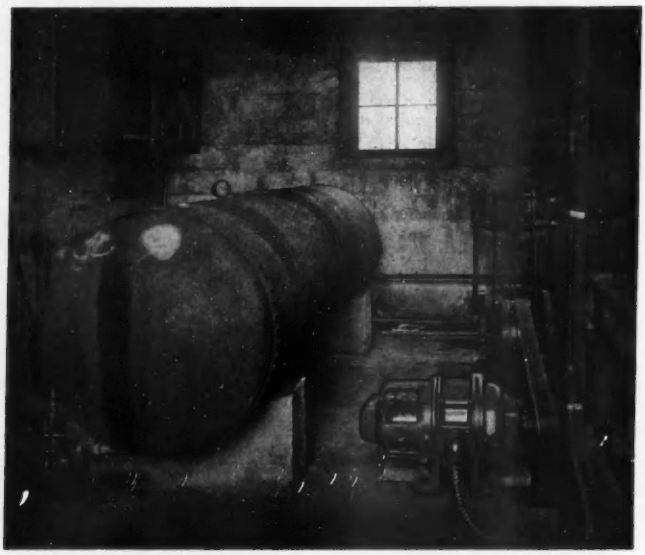
The washing of dishes is, under the best conditions a task which is generally disliked. But, a plentiful supply of both hot and cold water available under pressure at the sink will not only aid in chasing the dirt and grease but will make dishwashing a more pleasant job.

indispensable. A farm woman in Missouri once told me that when they had influenza in their home during the serious epidemic in 1918 that she considered their bathroom with its sanitary facilities worth at least $100.00 a day to them. Without the water under pressure and without the sanitary equipment it would have been impossible for them adequately to care for themselves since they were all sick.

To say it is worth $100.00 a day to have water under pressure, with sanitary facilities, on the farm, or to say it is worth $10.00 a day, is merely an attempt to put a money value on things of which, under certain circumstances, the value cannot be expressed in dollars and cents. In case of sickness a life might be at stake; a money value is not normally put on members of one's family.

Although an ordinary water system may not give complete fire protection, it certainly has some value in this connection. The most complete system would be of little value if there was no one at home. If a fire is discovered in time, to have water under pressure would be a great advantage over the bucket method of putting it out.

The question "What is it worth to have water under pressure in the home?" can best be answered by one or more counter questions. What would it



This gas engine driven water system was made completely automatic by changing to electric drive.

be worth to have a bathroom and sanitary fixtures when there are sick folks or very old people in the home? What would it be worth to have a plentiful supply of water at all times? In case of fire? When the temperature is 20° below or when it is 110° in the shade? What would it be worth to save the strength and time used in carrying the thousands of gallons of water used each year in the farm home? The value of all these things give some indication of the value of water under pressure in the home.

Advantages Are Numerous

When one begins to enumerate the advantages of having water under pressure in the home, he soon can appreciate its value although he may not be able to measure it in dollars and cents. When water is pumped directly from the well with a properly installed electric water system, there is less chance for contamination of the supply and this establishes a definite value from a health point of view.

While each home improvement provided to make the home modern adds to the convenience and comfort of the family, the water system is not only the greatest of all labor savers, but it adds vitally to the health protection of the entire family. We may say then that to provide water under pressure by installation of a water system is to invest in health insurance.

Water under pressure is of special value in easing the work in the house. This work might be classified under four heads: the care of the family, the care of the house, the care of the clothes, and the care and preparation of food. It is worth a great deal to have water both hot and cold when there are small children in the home. A plentiful supply tends to promote the habit of cleanliness because bathing is done more frequently and under better circumstances. In studies that have been made by workers interested in home improvement and improved living standards it has been found that when water is carried by hand, only five or six gallons per person are used each day, while when water is provided under pressure, thirty gallons or more are used. This means not only cleaner clothes and cleaner bodies but also cleaner homes.

Aids in Disposal of Sewage

An important factor in promoting sanitary conditions is the safe disposal of sewage. The most satisfactory method that has been found is by water carriage method, which cannot be used unless water is provided under pressure. A measure of value of such facilities as plumbing and sewage disposal in the care of the family can be made if we compare the rental of two houses in the city, one that is equipped with such facilities and the other which is not. In most instances a house that does not have water under pressure would be very difficult to rent except at a very low rate. Modern improvements in a city home will double its rental value and certainly such improvements in the country would attract and hold the highest class of tenants on a good farm.

When we consider the care of the house, the care of the clothes, and the care and preparation of food, we value water under pressure because of the convenience, largely because the amount of water needed for these tasks is not as great as that of the care of the family. A plentiful supply of water is needed on wash day, usually once a week, and most housewives who wash the family clothes will agree that where good equipment is available the most difficult part of the task is providing plenty of water. On many farms this must be done by hand pumping and if a fair money value is put on the person's time, who does the pumping, it would amount to a sum which would finance the entire water system.

According to Mr. Lorin Clark, a Champaign County farmer, one of the chief values of water from an electrically operated pump for livestock is that temperature can be governed both winter and summer. It is his idea that it is best to leave the water in the well until it is needed. This can be done with an electric automatic pump. This has a decided advantage in winter. Cattle watered from a nice cold tank do not do as well as when the water is 15 to 20 degrees above freezing as would be the case if the water was pumped direct from the well.

Much has been said about keeping the young folks interested in the farm. No one should be so selfish as to keep a boy or a girl on a farm when he or she is not content to stay. If living on the farm is made as attractive as it is in the city, there will be no need to worry. Our efforts should be toward that farming is made satisfying. Most folks naturally love the country and its freedom, and would rather live on a farm, or out in the country, than in town. When the farm home has water under pressure and other facilities

(*Continued on page* 18)

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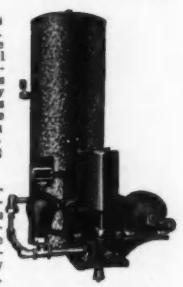
THE first thing you need is an abundance of pure water. EVERITE pumps are made so simple and strong that they will operate for years and years without giving any trouble. Hundreds of farmers have found them a joy to own—one of the best investments they could make. Whether you have a deep or shallow well—whether you need one hundred or a thousand gallons a day—there is an EVERITE Pump to meet your needs.

We'll be glad to plan a water system for your individual needs without obligation if you will write us now for further information. Remember, EVERITE is built to serve a definite pumping requirement—never to meet a price. Yet, they give you the most pump per dollar.



EVERITE PUMP and MFG. CO.
LANCASTER, PA.

Can YOU Can?

By VERA B. MEACHAM

SINCE so many women have taken to storing their gardens in cans for winter meals, the business of home canning has grown into vast importance.

No woman wants to put good food, time, and labor, and fuel into canning foods that may not keep. Nor need she if she will give heed to the warnings and recommendations of specialists in food who are studying the subject for her. There is no such thing as luck in canning.

That was impressed on me most strongly by one of the extension workers in our state when I called on her one day half way through July.

"Just tell the women who read your magazine that successful canning is not just one of the tricks of a good cook," she said. "Instead, it is based on an understanding of why foods spoil and how that spoilage can be prevented,—and on knowing a few simple rules, and following a few simple directions."

"But that's a pretty big subject," I began.

"Of course, but you can pick out, or rather folks have already picked out for you the things any women needs to know to can safely.

"Fresh foods, thoroughly cleaned, clean, perfect jars and new rubbers,—you know that, of course. She had better run her fingers around the top of each jar to make sure there are no knicks in it, and if she uses the glass top jars, she'd better test the bail, too. If it clicks smartly into place it will hold the lid tight. Then she'd better keep up to date and follow the methods recommended as a result of modern research if she would save the waste and danger of spoiled food.

"Fruits and tomatoes can be canned at the temperature of boiling water in a water bath, steamer, or in the oven, but non-acid vegetables and meats should be canned in a pressure cooker."

She was already gathering up her bag and closing the drawers of her desk as she talked, for she, with most of the food specialists in the state, is busy with community canning centers this summer.

"If I were you," she went on as we got up to

Non-acid vegetables and meats should be canned in a pressure cooker.

go, "I'd advise every woman who cans to get and to use Farmer's Bulletin 1471 from the Superintendent of Documents, Washington, D. C. It will cost just five cents, and it will give her reliable methods based on the best information that the trained workers in the Bureau of Home Economics have discovered. Her state bulletins should be in her kitchen, too, but they have to be watched, for many of them are still giving time tables for canning vegetables and meats in a water bath, or in the oven when scientific study of what happens inside a jar has proved that these methods will not destroy the bacteria that make trouble."

Dr. Louise Stanley in the bulletin referred to not only gives the best methods of canning, but shows how they are based on the knowledge of why food spoils and ways of preventing it.

"First, there are present in all fresh fruits and vegetables substances called "enzymes". These enzymes bring about the normal ripening of fruits and vegetables, and unless checked, the final decay of the product. Since heating is an essential step in canning, and these enzymes are readily destroyed by heat, it is only necessary to avoid the changes they may bring about the food between the time it is gathered and the time it is cooked."

This, then, is the reason for that "two hours from garden to can" order. With gardens of our own that rule is not hard to follow.

"The second and more important cause of food spoilage," Dr. Stanley goes on, "is the action of three groups of minute organisms which are present in the air, soil, water, and in fact, on everything. They are bacteria, yeasts, and molds. Yeasts and molds are easier to kill than bacteria, and do not cause so much difficulty in canning. Many types of bacteria go through a spore phase in their life cycle, a form in which they are very difficult to kill."

We cannot find out in our own kitchens just how long it takes to kill bacteria by heat. But research workers in many laboratories have found it out for us, and careful time tables for canning are part of this bulletin.

Bacteria Must Be Destroyed

"No growing or vegetative forms of bacteria will survive any length of time at the temperature of boiling water, but the spore form is killed at boiling temperature only by long continued heating, especially if the fruit or vegetable being canned has juice that is neutral or only very slightly acid. When the juices are acid as in fruits and tomatoes, both the vegetative and spore forms of bacteria are killed more quickly at the temperature of boiling water. The bacteria that require long continued heating at boiling temperatures, may be killed more quickly at higher temperatures such as are obtained in a pressure cooker."

The fuel you use for your canning can of itself play no great part in the success of the finished product, but it can make a deal of difference to you. If you are canning on an electric range, you are working,—unless the thermometer is playing tricks with your comfort,—in a cool kitchen. You are using a fuel that needs no carrying, and working over a fire that needs no watching.

You can put your mind on the job. Some one else, a dozen or a hundred miles away is tending machinery that makes electric current. He it is that watches your fire for heating the syrups or boiling up fruits and vegetables, the fire that heats the oven to process jars of fruit, and the fire that sends up the temperature in the pressure cooker, and even, unchanging fire that holds the pressure steady throughout the cooking time.

Cool canning when electricity builds the fire.

I saw for myself what a difference it can make,

FREE NEW BOOK!

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Of course you've thought about having running water and a lot of questions have come to mind. To help you with these questions, we have prepared a new book, just off the presses, which explains everything you would want to know about installing a running water system.
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MAIL THE COUPON

Processing peaches in the oven.

in a couple of calls I made on friends of mine who were canning one hot July day.

I turned up the lane that led to the Brown farm house about two o'clock. Adria waved to me from the shady porch where she was working with Carol and Jane, her daughters. They were putting up late cherries.

As I got out of the car, Adria said, "You'd better sit over here away from that door. The kitchen is as hot as the oven. We've put up cherries all morning, and it takes a big fire to keep the water hot to process them."

"Hot pack," I commented as one of the girls began measuring cherries, sugar and water into a big aluminum kettle.

"Yes," said Adria. "We think the flavor of the cherries is better that way. I just bring them to a good boil, then pack them into jars and process them five minutes. Carol got hold of an article in the Journal of Home Economics by—who wrote it, Carol?"

"Dr. F. W. Tanner, a bacteriologist in Illinois. He said that cold pack was responsible for lots of spoiled jars. It takes so long for the heat to get into the middle of the jar that the food there never does get all the processing it should have."

"It sounds reasonable, doesn't it?" said Adria. "We need all the information we can get about canning; I hate to can good food and have it wasted, so I'm going to follow this man's recommendations. If the kitchen weren't so hot this would be an easy way to can anyway."

"It's your turn to boil the cherries up this time, Jane," said Carol.

"No. It's yours. I did the last batch, don't you remember?"

Carol got up with a sigh. "Well, you bring in some more wood then; we want that water boiling when the jars are ready. Whew, this is the hottest place I've ever struck."

"You'll be glad enough next December to have these cherries for pies when the boy friends drop in," called Adria through the window.

Carol waved a spoon at her in half hearted fashion then turned her attention to the cherries.

My next stop was ten miles away where Hester Beckett was canning peaches in the oven of her electric range. She was sitting at a table peeling fruit when I got there. A whirring fan set in the upper half of a window across from the range was constantly drawing the air out of the kitchen and keeping a little breeze following in its wake.

"You're just in time to help me finish up this pack," said Hester. "I've got the syrup boiling and there are just two more jars to fill."

Hastily washing my hands at the clean white sink, I drew up a stool and waited while Hester dipped a basket of peaches in a pan of hot water and then quickly in and out of a pan of cold water. The skin came off easily and we cut the peaches in half and filled the jars in a very few minutes. We took them over to the stove and set them in shallow pans, with the jars far enough apart so the air could move around them freely. Then Hester filled each jar with boiling syrup, and I put the rubbers on and set the glass tops on evenly, raising the clamps to hold the lids in place, but leaving the lower clamp loose.

"The oven has been preheated to 300 degrees," said Hester, "But now I turn it back to 275 degrees for the processing."

Since the heat at which foods are processed and the time of processing are vital points in successful canning, it is well to follow a time table that you know is reliable. Those in the government bulletin on canning are the result of careful study by trained workers.

As Hester slid the jars into the oven, she glanced up at the clock. "3.30. That's all for half an hour."

"Do you use the government tables?"

"Yes. Dr. Stanley says to add 50% to the time for water bath processing when you heat the jars in the oven. That extra time means nothing to me, and I find this method so much cooler and easier, that I'd hate to go back to any other way."

Not a Difficult Task

So that is all there is to canning in the oven of an electric range. The same careful work of preparing the food to be sure. The same careful attention to detail. The same exactness in following directions for time and temperature, but no hot stove to work over, no stoking a fire under a boiler of hot water, just the setting of a dial and the turning of a button to keep the proper temperature around those jars of fruit throughout the time of their processing.

When you are canning with a pressure cooker, a four burner electric range gives you twelve heats to choose from. There is plenty of heat in one of the larger burners to bring the pressure up quickly and drive out the air; there is the low heat of a smaller burner to hold the pressure just

(*Continued on page* 18)

ON THE AIR

Conducted by Jerome J. Henry

Two Songs a Week Keep Her Busy

ANNETTE HANSHAW, featured singer in Captain Henry's Show Boat every Thursday evening, finds her short air performance really a full time job. She does two numbers in each program, but the dainty blue-eyed girl puts enough preparation into her pair of songs to keep her occupied between performances.

Lanny Ross, star of Captain Henry's Showboat, is one of radio's favorite singers. Here he's dressed in costume typical of Showboat entertainers.

Going through dozens of songs before she decides on the two she wishes to sing, Miss Hanshaw gets to work learning songs and music and then prepares an interpretation different from any version anyone else is apt to sing. This is what takes most of her time.

Much of her studying is done in her apartment near the studios. This retreat is quiet and it is here that she occasionally finds time to write a story for children or paint a picture.

Miss Hanshaw takes all phases of her career seriously. She answers all of her mail, giving it her personal attention. Her doll charm she sets off with delicate shades of blue and gray. Her admirers do not realize how really shy she is.

• • •

Amos 'n' Andy to Return on Radio in September

"WE'RE leaving it with you for a while, Frank. Some people are afraid of it, but it's always been our friend. At least, it won't bite or claw like those lions and tigers you've been catching in the jungles."

So saying, Amos 'n' Andy turned their microphone over to Frank Buck, of "Bring 'Em Back Alive" fame, and said goodbye to radio until September 17, when they will return from their vacation to resume their daily broadcasts. At this time Buck is being heard during their regular broadcast periods.

The word vacation means change to Freeman F. Gosden and Charles J. Correll, the celebrated radio pair. They've left the microphone as far behind as possible, one having gone to Europe, the other to Alaska. These two months there are no worries of fresh air taxicabs, garage or hotels, patent hair growers or affairs of the heart with Madam Queen and Senorita Butterfly.

Instead, during their absence listeners are hearing dramatized stories of the jungle based on actual experiences of Buck who has spent 33 years "bringing them back alive" from the jungles of the world.

• • •

THE spectacular "Roxy", billed for a big CBS hour this fall, is a painstaking showman. He's already auditioning his new gang for their September premiere.

• • •

AN enterprising young lady recently phoned the Columbia Broadcasting System to inquire how to send her autograph book to Little America for Admiral Byrd to sign when he flies over the South Pole.

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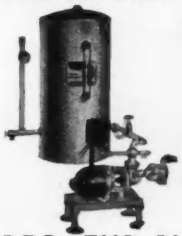

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ELECTRICAL HOUSEKEEPING

Conducted by
GAIL MEREDITH

WITH A SMALL IRONER

THE small ironing machine offers two important savings to the woman who does her own laundry work. The saving of time, and the saving of effort.

No woman who can iron well with a hand iron need fear that this new method will be hard to learn or awkward to use. She will be able to do the flat work perfectly as soon as she tries it, and with a little practice she can do on the machine most of the other things in the clothes basket.

And she can do them in less time.

For the flat pieces there is often a saving of two-thirds of the time. For the rest, the saving depends entirely on the deftness and experience of the woman doing the ironing.

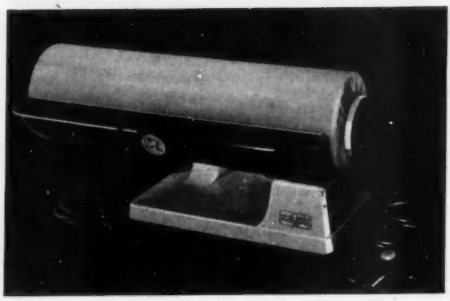
Mr. W. T. Ackerman of the New Hampshire Agricultural College Experiment Station, in a report on laundry equipment on New Hampshire farms says that one woman, the most skillful in handling the ironing machine, could do an entire ironing with the ironer in one-third of the time she had needed to do what she called "just the necessary things" with a 5-pound iron.

To time an ironing exactly a test was made in one of the laboratories at the University of Illinois. They ironed 100 pounds of clothes with sad irons, an electric iron, and an ironing machine.

It took almost fifteen hours to iron those clothes with the sad irons, about ten and a quarter with the electric iron, and seven and a half with the ironing machine.

We have no simple yardstick to measure the strength it saves,—but the saving is there, all right. You can see for yourself that the machine does away with a very considerable part of the work of ironing by hand. You can sit down instead of standing up for hours; you guide the clothes

(*Continued on page* 18)



Ready at any time to press away wrinkles.

No need to stand while using the electric ironer. Sit down and conserve your energy.

The top of the cabinet when removed serves as a table.

The electric ironer is capable of shortening the laundry day.

Questions and Answers

Conducted by H. J. GALLAGHER

Question: *I have an electric range but am interested in some small appliance that I can use in heating a small amount of water or in cooking a small amount of food without heating an entire burner on my range. Will thank you for any information.*

Answer: There are on the market many different makes of single heating units that can be plugged into an ordinary convenience outlet and used to supplement the range burners.

The small units ranging in size from 200 to 500 watts are often a valuable addition to the electric range in accomplishing exactly the results you desire.

Too often, however, operators of electric ranges make the mistake of trying to cook on too small a unit or on too low a "heat." Under these conditions the heat losses are excessive and the cost greater. The little unit for the little job and the larger units for the larger jobs is a good rule to follow.

Question: *We intend to buy a combination jig and dado saw for cutting and dove-tailing bee hives, the cut to be 1 inch wide and 1 inch deep. Should we buy an 8-inch or a 6-inch diameter saw? Size of motor? Energy consumed? Speed of saw and size of pulleys*

SPOERRI APIARRIES,
St. Bernard, La.

Answer: For general operation an 8-inch saw is preferable to a 6-inch saw; for a specific job as mentioned it wouldn't make any difference which size was used. A ½ H. P. motor would furnish ample power. The electric energy consumption of the motor would be about 500 watts per hour or two hours operation for one kw.-hr.

Circular saws should operate at a peripherical speed of 9000 feet per minute. This would result in a speed of 4500 R. P. M. (revolutions per minute) for an 8-inch saw or 6000 R. P. M. for a 6-inch saw. A 6½-inch pulley on the motor and a 2½-inch pulley on the 8-inch saw or a 2-inch pulley on the 6-inch saw will give the proper speeds. V-pulleys and a V-belt will be more satisfactory than flat pulleys and a flat belt.

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"My man cut their 'three squares' on time since we had our power company install CHROMALOX heating units on our range. Things seem to cook in half the time and the electric bills are lower"
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How Many Have You?

There are hundreds of practical ways for applying electricity on your farm today! But the selected list below includes only those that no modern progressive farmer can afford to overlook.

So, check up and investigate today. Many of your questions can be answered by our advertisers. For any information that you can't get through our advertisers, fill out and send in the handy coupon below.

FOR THE HOUSEHOLD:

Ranges (*see advt., inside front cover*)—Refrigerators—Clothes Washers—Vacuum Cleaners—Ironing Machines — Dishwashers — Flat Irons — Food Preparing Machines—Ice Cream Freezers—Sewing Machines—Table Cooking Appliances—Clocks—Range Replacement Units (*see advt., page 17, and inside front cover*)—Floor Polishers.

FOR WATER SUPPLY:

Automatic Water Systems (*see advt., pages 3, 4, 11, 13 and 15*)—Water Heaters (*see advt., inside front cover*).

FOR THE DAIRY:

Milking Machines—Milk Coolers—Cream Separators—Churns—Bottle Washers—Dairy Sterilizers—Clipping and Grooming Machines.

FOR POULTRY:

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MISCELLANEOUS:

Feed Grinders—Ensilage Cutters—Corn Shellers—Hay Hoists — Feed Mixers — Stationary Spray Plants (*see advt., page 3*)—Burglar Alarms—Ventilators — Soil Heating Equipment — Insect Traps and Screens (*see advt., page 15*)—Electric Fencing—Radio Sets.

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Electricity on the Farm, 24 W. 40th St., New York

Without cost to me, please have manufacturers send complete information on the following Electrically Operated Equipment which I am thinking of buying.

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I get electricity from .....

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With a Small Ironer

(*Continued from page* 16)

through the machine instead of lifting a six-pound weight a hundred times an hour; and you push a lever instead of pushing the iron, and pressing

down with all your might to get a satiny finish on your clothes.

You don't get tired sitting in a comfortable chair to iron; it takes little effort to handle the clothes as they turn steadily on the roll with the heated shoe held against them by mechanical power.

Moreover, the machine does this work for you with a very small amount of electricity. How small has been measured exactly by various college agencies studying the costs of using electric current.

The cost varies, as you can see, with the time spent in ironing and since this depends in turn, on the clothes to be ironed as well as the skill of the woman ironing them, no two homes are likely to need just the same amount of current for their work. But other people's bills give us an idea of what the job demands.

In one Kansas home a woman did the ironing for a family of six with just a little over 7 kw. hrs. a month. Her neighbor with a family of four used 8 kw. hrs. a month. Another family of seven used 13.5 kw. hrs. to do the month's ironing.

A few years ago the Committee on the Relation of Electricity to Agriculture reported that the average use of current for ironers on farms in every part of the country was 10.5 kw. hrs. a month.

Water Under Pressure

(*Continued from page* 11)

and there is health, comfort and happiness, both the young and the old folks will be content. This is worth more than gold!

It is generally known that water is very often the limiting factor in the production of garden, orchard and field products. However, the value of water under pressure in agricultural production is another story.

More might be said relative to the value of water under pressure in making the home attractive. So much of a woman's time on the farm is spent in the home that it needs to be made attractive. When comparing farm homes with city homes, people who are thinking of retiring from the farm usually are more interested in staying on the farm when those conveniences such as a water supply are installed to make the farm home a more attractive place in which to live.

Can You Can?

(*Continued from page* 14)

where you want it, not flunctuating up and down while the cans are in the cooker.

Mrs. Pearl Reifsteck whose writings on her experiences with electric equipment are familiar to readers of ELECTRICITY ON THE FARM wrote me that she always uses her pressure cooker for canning.

"I usually set it on the 1800 watt burner," she says. "It takes about 12 minutes to raise the temperature in the cooker 250 degrees, that is 15 pounds pressure, which I want for canning so many foods. The setting of the burner to keep it constant depends on the time necessary to complete the cooking or canning process. Oftentimes it is possible to turn the heat off completely after the pressure is up, though for some things, I find I must leave it on low."

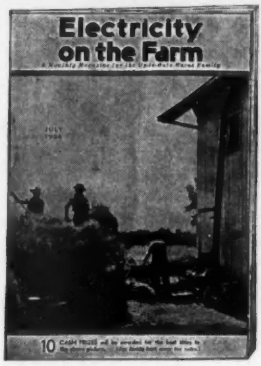
Miss Evelyn R. Turner, Extension Specialist in Home Management at Michigan, prefers to use a burner of low wattage, say 660, taking a little longer to get it up to pressure and then having that pressure held fairly constant with the stored heat of the burner.

Mrs. Luella Mortenson, new head of the Home Economics Extension work in Wisconsin, considers electricity an excellent fuel under a pressure cooker.

"No matter what foods you are canning, nor how many jars there are in the cooker, you can find some heat in those four burners that will hold the pressure steady during the processing. You can't generalize about it, for it will differ with the food, and the size and number of the jars, but any woman who cans on the same range year after year, can quickly discover which heat she needs for certain jobs."

The oven will supply the heat for processing any foods that can be canned safely at the temperature of boiling water. This is the equivalent for processing the jars in a water bath or steam.

TITLE CONTEST AWARDS



JULY COVER

RULES
September Title Contest

Ten cash prizes will be awarded for the 10 best titles for the picture on the front cover of this magazine.

The first prize will be $20 cash and nine second prizes of $2 in cash will be awarded.

In case of a tie, each winning contestant will receive the full cash prize to which he or she is entitled.

Titles need not be longer than 10 words — the shorter the better — and they do not have to rhyme.

All members of the farm family to whom this magazine was sent may submit titles, but each contestant may submit only one title.

Question "A" must be answered.

Entries must be sent to the Title Editor, ELECTRICITY ON THE FARM, 6 North Michigan Avenue, Chicago, Illinois, before October 1st.

Winning names and titles will be announced in the November issue.

Send your title on the coupon or make out a similar form on a plain sheet of paper or government postcard.

$20 First Prize for July Cover

"Humming motor, bulging mows —
Happy farmers — healthy cows."

NORMAN R. ROBERTS,
Indian Deep Farm, West Chester, Pa.

Nine $2.00 Prizes for July

"It is a wise farmer who makes hay while the motor hums."

MRS. M. F. UPHANS, Concordia, Mo.

"It does pay
To chop hay
The electric way."

SHIRLEY E. VAN WAGNER, R.F.D. 2, Hyde Park, N. Y.

"Farmers can pack and put away hay,
In half the time by the electrical way."

MISS POLLY FALWELL, R.F.D. 3, Box 150, Lynchburg, Va.

"Only one-half the man-power needed today
When hay is shredded the electrical way."

ANNA C. STEINER, R.F.D. 2, Greensburg, Pa.

"Filling the barn with finely chopped hay
Is now made easier by the electrical way."

CLEO RICHARDSON, R.F.D. 1, Spanish Fork, Utah.

"'Short and snappy' is the electrical way
Of filling the barn with new mown hay."

R. R. ROMBERGER, R.F.D. 2, Millersburg, Pa.

"The horse, rope and pulleys may be 'laid to rest' now,
As our electric friend puts the hay in the mow."

MRS. GLEN W. MYER, R.F.D. 1, Morristown, Ind.

"Good-bye to the 'pulley and hay hook day',
Since the barn is filled the electrical way."

RUTH LINDEMUTH, R.F.D. 1, Mt. Joy, Pa.

"Putting up hay is easy and fast,
With the old horse and hay fork a thing of the past."

ROBERT WERKHEISER, R.F.D. 1, Lena, Ill.

My title for the September Front Cover picture of ELECTRICITY ON THE FARM is.....

.....

.....

.....

(a) List the electrical appliances you do not own in the order your family plan to purchase them.

1. ..... 3. ..... 5. .....

2. ..... 4. ..... 6. .....

My name is..... **R.F.D.**.....

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